

- ? **Stercorarius pomatorhinus*. Pomatorhine Skua. (Kjóí.) N.
Stercorarius crepidatus. Richardson's Skua. (Kjóí.) N.
- ? **Stercorarius parasiticus*. Buffon's Skua. (Kjóí.) N.
Procellaria pelagica. Storm Petrel. (Drúdi.) N.
Procellaria leucorrhoa. Leach's Petrel.
- **Puffinus major*. Great Shearwater. (Stóra-Skrofa.) N.
Puffinus anglorum. Manx Shearwater. (Litla-Skrofa.) N.
- **Puffinus obscurus*. Dusky Shearwater. Recorded by Rev. H. H. Slater.
- Fulmarus glacialis*. Fulmar. (Fýlungur, Fýll.) N.
Colymbus glacialis. Great Northern Diver. (Himbrimi, Brúsi.) N.
Colymbus septentrionalis. Red-throated Diver. (Lómur.) N.
Podiceps griseigena. Red-necked Grebe.—Rare. One taken at Keflavik, December 1885. B. Gröndal.
Podiceps cornutus. Horned Grebe. (Flórgodi, Sefönd, Flódseti, Flóaskítur, Flóðskítur.) N.
- Alca torda*. Razorbill. (Álka, Klumba, Klumbunefja, Drunnefja.) N.
Alca impennis. Great Auk. (Geirfugl.) N.
Lomvia troile. Common Guillemot. (Lángxvíá, Lángxnefja.) N.
Lomvia bruennichi. Brünnich's Guillemot. (Stuttnefja.) N.
Uria grylle. Black Guillemot. (Teista, Peísta, Pjeturskofa; young birds, Peístukofa.) N.
Mergulus alle. Little Auk. (Haftírdill.) N.
Fratercula arctica. Puffin. (Lundi; young birds, Lundakofa.)
=108 species.

NOTE.—Prof. Newton says that *Anser albifrons* is known as Helsingi, but Nielsen states this name applies only to *Bernicla leucopsis*. Nordenskiöld, in 'The Voyage of the Vega,' speaks of *B. leucopsis* as the White-fronted Goose; so that the greater amount of white on the head of the latter species appears to have secured its right to this title among northern people.

XXI.—On the Birds of the Philippine Islands.—Part IV. *
*The Province of Albay, South-east Luzon, and the adjacent
Island of Catanduanes.* By W. R. OGILVIE GRANT. *With
Field-Notes* by JOHN WHITEHEAD.

SINCE the January number of 'The Ibis' appeared another large collection of birds has arrived from that indefatigable collector Mr. J. Whitehead, including about two hundred bird-

* Part I. Ibis, 1894, pp. 406-411; Part II. *ibid.* pp. 501-522; Part III. Ibis, 1895, pp. 106-117.

skins, of which three were perfectly new to science. During the first month of this expedition Mr. Whitehead collected near some mountains in the neighbourhood of Tobacco, in the province of Albay, which is situated in the extreme south-east of Luzon. There, however, he obtained very few specimens, for, being a great hemp-growing district, most of the forests had been cleared and bird life was extremely scarce, but it was here that he obtained all his specimens of the splendid green Fruit-Pigeon (*Carpophaga poliocephala*) now recorded for the first time from Luzon. Thence he shifted his camp to the foot of the Mayon volcano, remaining there for some three weeks; but there again birds were far from common, though it was on this collecting-ground that the yellow-green Silver-eye (*Zosterops luzonica*) was obtained. During the whole of this trip, which spread over the last part of July and the months of August and September, almost incessant rain greatly increased the difficulties of collecting; and, to add to Mr. Whitehead's troubles, most of the birds were in full moult at this season and difficult to make into good cabinet-skins, though specially interesting from our point of view as showing the changes of plumages.

In the beginning of September the first of the migrants had begun to arrive, in the shape of the Asiatic Golden Plover, which still had the greater part of the breast mixed with the black breeding-plumage; but Mr. Whitehead did not devote much time to the Waders, and on the 7th of September he set sail in a small boat for the adjacent island of Catanduanes, and after collecting there for a month returned to Manila. The only animals obtained were a few Bats, and we hear that Mammals are extremely scarce in every part of Luzon that Mr. Whitehead has visited. Of Reptiles and Fish a small collection was made, but contained nothing of special interest; and there was also a considerable collection of Insects belonging to various orders.

Mr. Whitehead has made some interesting remarks on the habits of *Rhabdornis mystacalis*, from which it appears that this bird's mode of life and habits are extremely like those of the Spider-hunters (*Arachnothera*), the greater part of its

time being spent in searching the flowers for insects. Nor is the resemblance in habits the only point he notes, for he sends me the tongues of two examples in spirits, and, as may be seen from the accompanying figure, the tongue is bifid and largely provided on the sides with cirriform appendages, giving this organ a very brush-like appearance. I am not at present prepared to express an opinion as to the importance of this character, though, from the cursory examination I have made of the structure of the tongue in various genera allied to *Rhabdornis*, I am inclined to believe that some important results may be obtained by a careful examination of this organ which may assist in the better arrangement of the Passeres.

It is gratifying to observe that my papers in 'The Ibis,' based on the results of Mr. Whitehead's former collections, have at last had the effect of inducing our American friends, Messrs. F. S. Bourns and D. C. Worcester, two of the naturalists who accompanied the second Steere expedition to the Philippines, to publish the long-expected paper descriptive of the results of their collecting trip. This "Occasional Paper" forms the first in the first volume of a new scientific publication issued by the Minnesota Academy of Natural Sciences. Here we find no fewer than 36 new species described, a list of known species with localities not previously recorded, and additional notes on previously described birds.

SPILORNIS HOLOSPILUS (Vig.); Grant, *Ibis*, 1894, pp. 407, 503.

Specimens were obtained both in the district of Albay and at Catanduanes.

HALIASTUR INTERMEDIUS, Gurney; Grant, *Ibis*, 1894, p. 407.

An adult female was shot at Catanduanes.

PERNIS PTILONORHYNCHUS (Temm.); Grant, *Ibis*, 1894, p. 503; 1895, p. 108.

Another immature female from Albay.

CORONE PHILIPPINA (Bonap.) ; Grant, Ibis, 1894, p. 504.

A perfect albino specimen was obtained at Catanduanes.

ORIOLOUS CHINENSIS, Linn. ; Grant, Ibis, 1894, p. 407, and 1895, p. 108.

Five adult specimens from Albay district and Catanduanes agree with the more southern examples of this species in having the yellow patch on the forehead scarcely extending beyond the anterior margin of the eye, and in this respect differ from the specimen already mentioned from Mt. Arajat, Central Luzon.

DICRURUS BALICASSIUS (Linn.) ; Grant, Ibis, 1894, pp. 408, 505.

An immature male from Albay district.

PERICROCOTUS NOVUS, Wardlaw-Ramsay ; Grant, Ibis, 1895, p. 109.

Another adult male was obtained at Albay, and also a female ; but unfortunately Mr. Whitehead was unable to preserve the latter specimen, which was in full moult.

LALAGE MELANOLEUCA (Blyth) ; Sharpe, Cat. B. Brit. Mus. iv. p. 91 (1879).

The adult and immature female of this species were obtained in Albay district.

LALAGE TERAT (Bodd.) ; Sharpe, Cat. B. Brit. Mus. iv. p. 95 (1879).

Adult specimens were obtained both at Albay and Catanduanes.

MUSCICAPA GRISEICTA (Swinh.) ; Grant, Ibis, 1894, p. 408.

A male in moult was collected in September at Catanduanes.

RHIPIDURA CYANICEPS (Cassin) ; Grant, Ibis, 1894, p. 506.
A male from Albay district.

RHIPIDURA NIGRITORQUIS, Vigors ; Sharpe, Cat. B. Brit. Mus. iv. p. 334 (1879).

Obtained both in Albay district and in Catanduanes ; specimens dated the 22nd August are still in full moult.

CALLAEOPS, Grant, Bull. B. O. C. no. xxiii. p. xviii, and
no. xxiv. p. xxii (1895).

A new genus of *Muscicapidæ* most nearly allied to *Arses*, which it resembles in having a disk-like wattle formed by the prolongation of the eyelid, which entirely surrounds the rather large eye. As in *Terpsiphone*, there is a large, full occipital crest, and the tarsi and toes are short and slender; but the tail is like that of *Rhipidura*, wedge-shaped, and composed of 12 feathers, the outer pair being $\frac{2}{3}$ of the length of the middle pair. The first flight-feather is half the length of the second, which is about equal to the tenth; the fourth being slightly the longest.

The only known species of this peculiar genus is

CALLAEOPS PERIOPHTHALMICA, Grant, Bull. B. O. C. no. xxiii. p. xviii (1895).

Adult male. General colour deep black with a slight purplish gloss, especially on the back and breast; the middle of lower breast and belly white, the under tail-coverts being edged with the same colour. Wattle surrounding the eye, bill, and feet said to be pale blue. Total length 8·5 inches, wing 3·5, tail 4·5, tarsus 0·6. The only specimen sent home by Mr. Whitehead was not of his own collecting, but purchased in Manila and, as I understand, said to have been obtained in that vicinity. The colour of the soft parts and sex are, I fancy, only given on the authority of the collector from whom the bird was obtained.

SIPHIA PHILIPPINENSIS (Sharpe); Grant, Ibis, 1894, pp. 408, 507.

Two specimens were obtained in Albay district on the 26th of August and the 2nd of September, both in full moult.

POLIOLOPHUS UROSTICTUS (Salvad.); Sharpe, Cat. B. Brit. Mus. vi. p. 63 (1881).

A male of the Wattled Brown Bulbul was obtained at Catanduanes.

PYCNONOTUS GOIAVIER (Scop.); Grant, Ibis, 1894, p. 408.

A male from Albay district.

CITTOCINCLA LUZONIENSIS (Kittl.) ; Grant, Ibis, 1894, p. 408.

Two males from Catanduanes.

MEGALURUS PALUSTRIS, Horsf. ; Grant, Ibis, 1894, p. 510.
A male from Catanduanes.

ORTHOTOMUS DERBIANUS, Moore ; Grant, Ibis, 1894, p. 408.

Obtained both in the Albay district and at Catanduanes. Mr. Whitehead procured the nest of this species in a bush (at present not identified), the large pointed leaves being sewn together in the usual Tailor-bird fashion, and forming a deep cup with a woven lining of spiders' webs and down.

PARUS ELEGANS, Less. ; Grant, Ibis, 1894, pp. 408, 511.

An adult male and a bird in immature plumage were obtained in Albay district. *The immature bird* has the general colour above dark olive, darkest on the crown, a small yellowish-white patch on the middle of the nape and one on each side of the neck ; the wing-coverts tipped with yellowish white. Chin, throat, and fore neck dirty yellow down the middle, shading into dark olive on the sides ; the rest of the underparts yellow, but paler than in the adult.

HYLOTERPE PHILIPPINENSIS, Walden ; Grant, Ibis, 1894, p. 409.

Obtained in Albay district. Being fresh moulted, the specimens before us have the upper parts richer olive inclining to brown, and the yellow of the underparts is more brilliant than in the type specimens, which are in rather worn plumage.

LANIUS LUCIONENSIS (Linn.) ; Grant, Ibis, 1894, p. 512.

A fine adult from Catanduanes.

CINNYRIS SPERATA (Linn.) ; Gadow, Cat. B. Brit. Mus. ix. p. 63 (1884).

It seems curious that two such nearly allied species as *C. whiteheadi* and *C. sperata* should both be found in Luzon, though in different parts of that large island. The present species is extremely distinct from *C. whiteheadi*, which was

obtained in the northern highlands of the Benguet district, having the mantle and upper back deep maroon-red instead of black, and showing other minor differences. *C. sperata* is found at any rate as far north as the neighbourhood of Manila, and extends its range through the Philippine Islands southwards to Palawan.

CINNYRIS JUGULARIS (Linn.) ; Gadow, Cat. B. Brit. Mus. ix. p. 84 (1884).

From Albay district and Catanduanes. Both sexes of this species are easily distinguished from *C. obscurior* obtained in the Benguet district (see Ibis, 1894, p. 514) by their larger size, olive back, and more brightly coloured underparts. Wing 2·2–2·3 inches.

CINNYRIS EXCELLENS, Grant, Bull. B. O. C. no. xxiii. p. xviii (1895).

This beautiful new Sun-bird is most nearly allied to *C. guimarasensis*, Steere, but differs in the following points :—

Adult male. The metallic patch of feathers on the forehead is steel-green, and does not extend so far back; the rest of the crown and nape yellowish olive-green, shading into orange on the back; and the sides of the belly and flanks are olive-grey, pale yellowish in the middle, with a brilliant orange-red patch above. As in *C. guimarasensis*, the present species has the chin and upper part of the throat metallic purplish blue, and the chest and breast velvety black, divided up the middle by a brilliant orange-red band. Total length 4·0 inches, wing 1·9, tail 1·2, tarsus 0·55.

A bird which appears to be a *nearly adult female*, though the sex was not ascertained, differs from the female of *C. guimarasensis* [as described by Bourns and Worcester, Occasional Papers, Minn. Acad. Nat. Sci. i. no. 1, p. 55 (1894)] in the following points :—The head and nape are dull olive-green, shading into brighter olive-green (instead of brownish) on the rest of the upper parts; the sides of the face are dull olive (not dark ashy grey); the throat and chest grey slightly washed with yellow, rather more marked on the chin, and

the rest of the underparts are pale yellowish olive, with no trace of the orange-yellow on the breast as described in the female of *C. guimarasensis*.

RHABDORNIS MYSTACALIS (Temm.); Grant, Ibis, 1894, p. 409.

Mr. Whitehead has sent me some interesting notes on this bird, which he considers ought to be placed in close proximity to the genus *Arachnothera*, the same brown style of plumage being found in the aberrant form *Arachnothera julie*, one of his discoveries on Mt. Kina Balu. Much of this bird's time, he says, is spent in searching among the flowers, just like an *Arachnothera*, and he also points out that the tongue is brush-tipped. He has forwarded me two examples in spirits, one of which is represented in the accompanying figure (fig. 1), and I have also shown the tongues of such birds as the Wall-Creeper (*Tichodroma muraria*), the 'Tree-Creepers (*Certhia* and *Salpornis*), the Australian Creepers (*Climacteris*), and the Nuthatch (*Sitta cæsia*), with which *Rhabdornis* has been associated.



Fig. 1.



Fig. 2.



Fig. 3.

In comparing the tongues of these various forms the great differences in the structure will at once be appreciated. *Rhabdornis* has the tongue bifid at the extremity and ciliated along the sides only, and of all the tongues which I have so far been able to examine is most like that of *Sitta cæsia* (fig. 2).

The tongue of the Wall-Creeper (fig. 3) is remarkably simple in form, being merely bilobed at the extreme tip, and devoid of all bristle-like processes; while in *Certhia stoliczkae*

(fig. 4) and *Salpornis spilonotus* (fig. 5) different modifications will be seen, the tongue in each case terminating in about five bristles. In *Climacteris leucophaea* (fig. 6), which, so



Fig. 4.

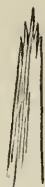


Fig. 5.



Fig. 6.

far as external characters go, seems to be the most nearly allied form to *Rhabdornis*, the tongue has the extremity entire, and the upper surface as well as the sides beset with short bristles, giving it a remarkably brush-like appearance.

I am not at present prepared to express an opinion as to the importance of the shape of the tongue as a character in classification, though I believe from what I have already seen that some useful hints may be derived from this source, which may lead to a better arrangement of the Passeres. I intend on a future occasion to publish the results of my investigations on this subject.

ZOSTEROPS LUZONICA, Grant, Bull. B. O. C. no. xxiv. p. xxii (1895).

This new species is most closely allied to *Z. flava* (Horsf.), which is found in Sumatra, Java, and Borneo, and to *Z. nigrorum*, Tweed., from Negros. It is easily distinguished from the former by the almost uniform olive-green upper parts, only the forehead, rump, and upper tail-coverts being slightly brighter and washed with yellow; and from the latter it differs in having no black spot in front of the eye, the upper parts brighter olive, and the yellow on the throat and middle of the underparts more golden with no greenish tinge.

Adult male and female. Upper parts and sides of the head olive-green, washed with yellow on the forehead, rump, and upper tail-coverts; lores and underparts clear yellow, washed

with olive on the sides and flanks. Total length 3·8 inches, wing 1·8, tail 1·4, tarsus 0·6.

I had some hesitation in adding another species to the host of *Zosterops* already described; but, there being no name for this quite distinct form, saw no alternative.

DICÆUM RUBRIVENTER, Less.; Sharpe, Cat. B. Brit. Mus. x. p. 36 (1885).

Only met with in the district of Albay.

HIRUNDO JAVANICA, Sparrm.; Grant, Ibis, 1894, p. 516. ♀
A male in moult from Catanduanes.

MOTACILLA MELANOPE, Pall.; Sharpe, Cat. B. Brit. Mus. x. p. 497 (1885).

An immature female from Catanduanes.

MOTACILLA FLAVA, Linn.; Sharpe, Cat. B. Brit. Mus. x. p. 516, pl. vi. figs. 3-5 (1885).

A male from Catanduanes. The only previous record from the Philippines is from the island of Negros.

EMBERIZA SPODOCEPHALA (Pall.); Sharpe, Cat. B. Brit. Mus. xii. p. 522 (1888).

An immature male was obtained on Catanduanes, and the species is now recorded for the first time from the Philippine group.

ARTAMUS LEUCOGASTER (Wagl.); Grant, Ibis, 1894, p. 517.
From both Albay district and Catanduanes.

SARCOPS CALVUS (Linn.); Grant, Ibis, 1894, p. 517.

Dr. Sharpe, in writing of the changes of plumage in this bird, expressed his opinion (Cat. B. Brit. Mus. xiii. p. 97) that "from the remains of grey both above and below, over-spreading the black plumage, it would appear that the pure silvery-grey colour is a seasonal plumage." Having gone through the series in the British Museum, I was at first inclined to arrive at the same conclusion; but now, having received a good many additional specimens from Mr. Whitehead, and Mr. Rothschild having also kindly lent me his series for comparison, I have a much larger amount of material before me, and, as I shall presently show, Dr. Sharpe's conclusions are apparently incorrect. He did not appreciate

the fact that the underparts in true *S. calvus* remain black at all seasons, only the flanks being grey, or he would not have united it with his *S. lowi* from Sibutu. This allied form, of which only the type is known, has the sides of the chest and the whole of the underparts grey, with only a line of blackish feathers down the middle of the belly, and appears to me to be perfectly distinct from *S. calvus*, which is found in the adjacent Tawi Tawi group and northwards throughout the Philippines. I think Dr. Sharpe was right in the first instance when he described the Sibutu bird as distinct.

I have been much puzzled over the differences in plumage in the true *Sarcops calvus* (that is, the species with the underparts black). I have a large series of birds before me which are now arranged geographically, and in this way only have I been able to obtain a satisfactory solution to the problem of plumage. Some specimens have the upper parts entirely silvery grey: that is to say, the neck, mantle, back, rump, and upper tail-coverts; others have the entire mantle and upper back smoky black, in strong contrast to the silvery grey of the neck and lower back, &c. In studying the series before me I have asked myself the following questions:—

Can the difference of plumage be seasonal? No, for both entirely grey and black-backed forms are to be met with at all seasons.

Can the difference in plumage be sexual? No, for I have specimens belonging to both sexes in both styles of plumage, the sex having been ascertained by reliable collectors.

Can the difference in plumage be due to age, the grey-backed forms being the adult and the brown-backed the young, as has been already suggested? No, for the brown-backed forms occur in every month of the year and have no appearance of being young birds.

Can the difference be geographical? Yes, it is. The grey-backed forms come from North Luzon, Mindoro, Marinduque, Sulu, and Bongao.

The black-backed forms come from Catanduanes, South Luzon (Albay district), Leyte, Cebu, and Negros, also Mindanao (extreme north and south) and Basilan.

Looking at these different ranges on the map, it will be seen that all the grey-backed forms on the table before me are found west of about longitude 122° , which cuts through the Islands of Marinduque and Basilan. The Marinduque bird belongs to the typical grey-backed form, while the only male we have from Basilan, though it certainly must be included in the black-backed group, has a distinct grey shade on the feathers of the mantle and upper back, which may be described as greyish black. Tweeddale, in writing on the birds of Basilan (P. Z. S. 1879, p. 72), says, "One example (σ) [which is the example just mentioned] with interscapular region brown, the others with that part hoary grey." From this it appears that both forms intergrade in this island. Again, in specimens from the island of Guimaras, which lies rather to the west of longitude 122° , I have three examples which are undoubtedly referable to the black-backed form, but one of them has distinctly a greyish tinge on the mantle. It would be interesting to see specimens from Panay, the large island touching 122° longitude, as no doubt the forms found there are mostly of an intermediate type.

Briefly summing up the above facts, we find that east of longitude 122° , or thereabout, all the Philippine examples of *S. calvus* have the mantle and upper back brownish black; while west of this line all have the upper parts uniform silvery grey; intermediate forms being met with only in localities situated along the line where the two forms intergrade.

It may be considered advisable to separate the brown-backed eastern form under a distinct name, but before doing so it would be necessary to examine a series of birds from Panay.

CALORNIS PANAYENSIS (Scop.); Sharpe, Cat. B. Brit. Mus. xiii. p. 147 (1890).

Two examples of this Glossy Starling were obtained at Albay and Catanduanes.

MUNIA BRUNNEICEPS, Wald.; Sharpe, Cat. B. Brit. Mus. xiii. p. 338 (1890).

Several adult examples of this southern form of *M. formosana* were obtained at both Albay and Catanduanes. This is, no doubt, the bird that Steere calls *M. atricapilla* [List Birds Mamm. Philippines, p. 23 (1890)], and records from many of the more southern islands of the group, but it has not previously been got so far north.

UROLONCHA EVERETTI (Tweed.); Sharpe, Cat. B. Brit. Mus. xiii. p. 363 (1890).

A single female specimen was shot at Catanduanes.

CAPRIMULGUS GRISEATUS, G. R. Gray; Hartert, Cat. B. Brit. Mus. xvi. p. 550, pl. xi. (1892).

One example of this rare Goatsucker was met with at Catanduanes.

The plate in the Catalogue referred to above is extremely badly coloured and quite misleading. In the first place, the general colour of the type (which the above figure is supposed to represent), as well as that of the three other specimens before us, is far less bright, the general tone being *grey*, while the markings vary from pale whitish buff to rufous buff, and are very different from the brilliant colouring shown in the plate, which is about as incorrect as it can be.

MEROPS BICOLOR, Bodd.; Grant, Ibis, 1894, pp. 409, 519.
A male from Catanduanes.

ALCEDO ISPIDA, Linn.; Grant, Ibis, 1894, pp. 409, 520.
An immature male from Catanduanes.

HALCYON CHLORIS (Bodd.); Sharpe, Cat. B. Brit. Mus. xvii. p. 273, pl. vii. fig. 3 (1892).

Adult and immature birds from Albay district and Catanduanes.

PENELOPIDES MANILLÆ, Bodd.; Grant, Ibis, 1894, pp. 409, 520.

A young male in which the subterminal tail-bar does not extend on to the outer tail-feathers, and is but slightly developed on the penultimate pair. The casque is not yet

differentiated from the line of the culmen, but otherwise the plumage resembles that of the adult.

IYNGIPICUS VALIDIROSTRIS, Blyth ; Grant, *Ibis*, 1895, p. 114.

Specimens from Albay district and Catanduanes are typical examples of this species.

MICROSTICTUS FUNEBRIS, Valenc. ; Grant, *Ibis*, 1894, p. 409, & 1895, p. 115.

Obtained at Albay and Catanduanes.

XANTHOLEMA HEMATOCEPHALA (P. L. S. Müll.) ; Shelley, *Cat. B. Brit. Mus.* xix. p. 89 (1891).

Adult and immature specimens from Albay district.

CACOMANTIS MERULINUS (Scop.) ; Grant, *Ibis*, 1894, p. 520.

An immature bird from Albay and a male adult from Catanduanes.

CENTROPUS VIRIDIS (Scop.) ; Grant, *Ibis*, 1894, p. 410.

Adult males from Albay and Catanduanes.

DASYLOPHUS SUPERCILIOSUS (Cuv.) ; Grant, *Ibis*, 1894, p. 410.

Both sexes were collected at Albay and Catanduanes.

LEPIDOGRAMMUS CUMINGI (Fraser) ; Grant, *Ibis*, 1894, p. 520.

Obtained in Albay district. One is a mere nestling, and has the general colour of the head, mantle, and underparts brownish black, the feathers being more or less fringed with rufous. Among the feathers of the forehead are a number of whitish bristles which look as if they had been singed at the extremity. These are, no doubt, the prototypes of the curious wax-tipped feathers of the adult. The wings and tail are much like those of the adult, being black glossed with greenish blue and the latter tipped with white. Tarsus 0·9 inch, middle toe and claw 1·2. In the adult, tarsus 1·65, middle toe and claw 1·55.

CACATUA HÆMATUROPYGIA (L. S. Müll.); Salvadori, Cat. B. Brit. Mus. xx. p. 130 (1891).

Albay district.

PRIONITURUS DISCURUS (Vicill.); Salvadori, Cat. B. Brit. Mus. xx. p. 417 (1891).

Mr. Whitehead having sent a good series of adult and immature examples of this fine Racquet-tailed Parrot from Catanduanes, a few remarks on the differences in plumage between these birds and specimens from the more southern Philippine Islands are necessary. In spreading out our series geographically I find there is a considerable difference in the amount of blue on the crown. Typical specimens of *P. discurus* from North and South Mindanao, Panaon, and Basilan have the whole crown intense bright blue, forming a rather sharply defined line where it meets the yellow-green nape. On the other hand, the birds sent from Catanduanes have the blue paler and less extended, and confined to the middle of the crown, the whole forehead being green. This is the case in what appear to be three adult males, with *well-developed racquets* to the middle tail-feathers; but on examination all three are found to be moulting bright blue feathers on the middle of the crown, and from this as well as for other reasons it seems probable that the blue on the crown will eventually become more extended; for there is a male specimen collected by Dr. A. B. Meyer in Luzon, which is perfectly intermediate between the birds from Catanduanes and those from the more southern islands mentioned above; the whole crown in this specimen is washed with blue, most intense in the middle, and shading gradually into green on the forehead, sides of the head, and nape; in this last respect it differs from the southern forms, for in these the blue cap extends to the base of the culmen and is sharply defined from the yellow-green nape. It may be that at some future time someone may separate these two forms, but I shall not do so, for the evidence before me seems to show that they are merely slight insular varieties which shade gradually one into the other.

The Sulu bird (*P. suluensis*, Blasius) has been separated on account of its larger size and the blue on the crown being more extended, beginning at the anterior edge of the forehead and extending to the occiput. Its larger size (wing 6·5 inches) one can appreciate, but the supposed difference in the blue on the crown and other minor characters mentioned are equally found in birds from Basilan, Mindanao, &c., so that *P. suluensis* can only be considered a rather larger insular race of *P. discurus*, which it absolutely resembles in plumage.

LORICULUS PHILIPPENSIS (P. L. S. Müll.); Grant, Ibis, 1894, pp. 410, 521.

From Catanduanes.

OSMOTRERON AXILLARIS (G. R. Gray); Salvadori, Cat. B. Brit. Mus. xxi. p. 48 (1893).

An example from Catanduanes.

PHABOTRERON LEUCOTIS (Temm.); Grant, Ibis, 1894, pp. 410, 521.

Obtained at Catanduanes.

PTILOPUS LECLANCHERI (Bonap.); Salvadori, Cat. B. Brit. Mus. xxi. p. 79 (1893).

A male in poor condition from Catanduanes.

CARPOPHAGA CHALYBURA, Bonap.; Grant, Ibis, 1894, p. 521.

Additional examples from Albay district and Catanduanes all bear out the characters mentioned in the above reference to this Fruit-Pigeon, the dark purplish-grey band across the nape being well-marked in all. I think this form may be fairly retained under Bonaparte's name and kept separate from typical *C. anea*.

CARPOPHAGA POLIOCEPHALA (G. R. Gray); Salvadori, Cat. B. Brit. Mus. xxi. p. 209 (1893).

Several examples of this magnificent and very rare Green Fruit-Pigeon were collected in the Albay district. It has previously been obtained only in the more southern islands, and was not met with at Catanduanes.

MACROPYGIA TENUIROSTRIS, G. R. Gray; Grant, Ibis, 1894, p. 521 (1893).

A male adult from Albay district.

TURTUR DUSSUMIERI (Temm.); Grant, Ibis, 1895, p. 117. Several specimens from Albay and Catanduanes.

CHALCOPHAPS INDICA (Linn.); Salvadori, Cat. B. Brit. Mus. xxi. p. 514 (1893).

An immature bird from Albay district.

EXCALFACTORIA LINEATA (Scop.); Grant, Cat. B. Brit. Mus. xxii. p. 253 (1893).

Adult males and females purchased from a native collector and said to be obtained in the neighbourhood of Manila.

TURNIX FASCIATA (Temm.); Grant, Cat. B. Brit. Mus. xxii. p. 535 (1893).

Two somewhat immature females, also from the neighbourhood of Manila.

TURNIX OCELLATA (Scop.); Grant, Cat. B. Brit. Mus. xxii. p. 548 (1893).

A pair of very fine females obtained from the same collector. These are the most adult examples I have seen, the whole chin and throat being *entirely* black.

HYPOTÆNIDIA TORQUATA (Linn.); Sharpe, Cat. B. Brit. Mus. xxiii. p. 43 (1894).

An adult pair from Albay and Catanduanes.

GALLICREX CINEREA (Gmel.); Sharpe, Cat. B. Brit. Mus. xxiii. p. 183 (1894).

A male and female adult from Catanduanes in the brownish-buff plumage of autumn and winter. Neither Dr. Sharpe in the above work, nor *any other* author, so far as I am aware, make the slightest reference to the autumn change of plumage which is so marked in the male, only the breeding-dress being described, in which the whole of the hind neck and underparts, as well as the general colour of the upper parts, are black. In the *fully adult male* before me the whole of the underparts from the throat downwards are pale buff

with rather fine, somewhat wavy, brownish-black bars, except on the middle of the belly, which is paler and nearly devoid of markings; the under tail-coverts have the ground-colour more rufous buff; the rest of the plumage also resembles that of the *female*. The latter does not appear to have any different breeding-plumage, or, if she changes, the feathers are very similar to those of the autumn dress.

CHARADRIUS FULVUS, Gmel.; Seebohm, Geogr. Distr. Charadr. p. 99 (1888).

Two adult birds from Albay district shot on 3rd September still retain part of the black breeding-plumage on the under surface of the body.

ÆGIALITIS DUBIUS (Scop.).

CHARADRIUS MINOR, Wolf & Meyer; Seebohm, Geogr. Distr. Charadr. p. 130 (1888).

From Catanduanes.

TRINGOIDES HYPOLEUCUS (Linn.).

Totanus hypoleucus (Linn.); Seebohm, Geogr. Distr. Charadr. p. 371 (1888).

An adult female from Albay district.

RHYNCHÆA BENGALENSIS (Linn.).

Rhynchæa capensis, Seebohm, Geogr. Distr. Charadr. p. 456 (1888).

Adult males from Catanduanes.

NYCTICORAX MANILLENSIS, Vigors; Grant, Ibis, 1895, p. 117.

Five adult male specimens in moult from Albay and Catanduanes.

ARDETTA CINNAMOMEA (Gmel.); Grant, Ibis, 1894, p. 522.
Male from Catanduanes.

PHOYX MANILLENSIS (Meyen); Sharpe, Bull. B. O. C. vol. iii. p. xxxviii (1894).

A fine adult male from Albay district, bearing out the characters of the species.

BUBULCUS COROMANDUS (Bodd.); Tweed. Trans. Zool. Soc. ix. p. 237 (1875); Steere, List Birds & Mamm. Philippines, p. 26 (1890).

An adult male from Catanduanes.

BUTORIDES JAVANICA (Horsf.); Grant, Ibis, 1894, p. 522.
Immature male from Albay district.

MELANOPELARGUS EPISCOPUS (Bodd.); Tweed. Orn. Works, pp. 200, 600, 645, 660 (1881); Steere, List Birds & Mamm. Philippines, p. 27 (1890).

A male from Albay district.

ANAS LUZONICA, Fraser; Grant, Ibis, 1895, p. 117.

A male from Catanduanes.

DENDROCYGNA ARCUATA, Cuv.

Dendrocygna vagans, Steere, List Birds & Mamm. Philippines, p. 27 (1890).

An adult pair from Catanduanes.

XXII.—*Bulletin of the British Ornithologists' Club.*

Nos. XXII.—XXIV.

No. XXII. (Dec. 29th, 1894.)

THE twenty-first meeting of the Club was held at the Restaurant Frascati, 32 Oxford Street, on Wednesday, the 19th of December, 1894.

Chairman: P. L. SCLATER, F.R.S.

Members present:—G. BARRETT-HAMILTON, E. BIDWELL, J. L. BONHOTE, W. E. DE WINTON, A. H. EVANS, JOHN GERRARD, W. GRAHAM, G. H. CATON HAIGH, E. HARTERT, J. E. HARTING, W. H. HUDSON, E. G. B. MEADE-WALDO, F. MENTEITH OGLIVIE, C. E. PEARSON, H. J. PEARSON, HOWARD SAUNDERS (*Treasurer*), R. BOWDLER SHARPE (*Editor*), A. B. R. TREVOR-BATTYE, C. A. WRIGHT, JOHN YOUNG.

Visitors: GRAHAM KERR, D. F. MACKENZIE, ARNOLD PIKE, T. M. PIKE, HUGH L. POPHAM, H. STEVENS, Capt. CAYLEY WEBSTER.